

Beatbox, the Human Instrument

Ty Geiger

Abstract

Beatbox is a form of vocal percussion primarily involving the art of mimicking drum machines, synthesizers, and other various instruments using parts of one's body. When learning beatboxing, novices usually find it challenging because they must discover how to use their body in unique ways. Furthermore, online learning materials, such as YouTube tutorials, often lack educational clarity when teaching beatboxing sound production. To offer comprehensible learning materials, beatboxer and founder of humanbeatbox.com, Rev Gav created the learning system "Beatboxology" where he added some clarity to the technical side of beatbox sound production. However, his system has not gained popularity in the beatboxing community. Recent research on beatboxing focuses on classification, classifying sounds into categories based on their anatomic and phonetic qualities. However, these studies lack any connection back to learning beatbox sounds and focus more on their ties to anatomy and phonetics. (Dehais-Underdown et al., 2021; Patil et al., 2017). To gain more insight into the learning process of beatbox sounds, I conducted oral history interviews to learn from music educators and beatboxers through their lived experiences in music and beatbox. The findings of the interviews revealed themes of the intuitiveness and secondhand nature of beatbox sound production, a disconnect in beatbox that creates a sense of randomness and a feeling of doing rather than understanding, and an emphasis on the importance of connecting theory to practice when learning beatbox sounds.

Introduction

Beatbox is a popular sect of vocal percussion inspired by the sounds of early drum machines such as the TR-808. However, in today's beatbox scene we see a vast array of sounds and ideas displayed in beatbox. With an ever growing amount of sounds being made in the beatbox community, one of the most important skills of a beatboxer has quickly become their efficiency in learning sounds. However, this skill does not come easily to all. Furthermore, online learning materials, such as YouTube tutorials, often lack the clarity needed for a

well understood and accessible learning resource. To gain more understanding of the learning process of beatbox sounds, I conducted oral history interviews to learn from music educators and beatboxers through their experiences in music, music education, and beatbox.

Literature Review

In attempt to answer my research question, I went to the literature. I found many studies about how beatbox sounds are made, in which researchers classified different sounds by what body parts were

being used to make them, what airflows were being utilized, and even what phonetic sounds were present. (Dehais-Underdown et al., 2021; Patil et al., 2017; Blaylock et al., 2017; Paroni et al., 2021; Proctor et al., 2013; Stowell et al., 2008). However, these studies mainly used beatboxing as means to research something about anatomy or linguistics. In all, there was very limited studies about teaching and learning beatbox, with one being about an English teacher in Japan who taught Japanese students English but taught them beatboxing as well to see if it would make up for the linguistic differences between English and Japanese. (フレイク., 2019). Once again, the main issue I ran into was that this study was not as much about learning beatbox as it was about learning English.

Methodology

Since there was a lack of research about learning beatboxing in the literature, I conducted oral history interviews to learn from music educators and beatboxers through their lived experiences in music and beatbox. In total I conducted 4 interviews. First, I interviewed Philip Tacka, a Music Education Professor at Millersville University. My second interview was with Guus Steenkamp, known as "Infernape", a Dutch beatboxer who most recently was a quarterfinalist in the Dutch Beatbox Championships of 2023. My third interview was with Giancarlo Elisii, the Canadian beatbox champion, beatbox educator, and contender for multiple world champion titles. My last interview was with Ayaan Blah, a casual beatboxer from India.

Findings

Through the analysis of my oral history interviews, three main themes emerged. The first theme is that learning beatbox sounds is intuitive and executing these sounds can come as second nature. All three beatboxers in my study shared their

experiences of learning many beatbox sounds naturally, such as Blah who said “every sound I can do came to me pretty easily”, or Elisii who similarly said “pretty much everything that was drums came relatively easy to me.” Elisii also talked about an experience in which before he even knew what beatboxing was, he was doing a very complicated beatbox sound completely by coincidence. Steenkamp, known for his extremely innovative sound design, reflected on his experiences with the second nature of beatboxing saying “I know what's happening. And I can say it with words, but I cannot express it into a more simple way to explain it or to teach.”

The second theme from the interviews is that beatboxers appear to experience a disconnect between beatboxing and the mechanics behind creating beatbox sounds. One way they expressed the disconnect was through doing rather than understanding beatboxing. Blah discussed his younger brother's experiences with beatboxing: “My younger brother has really picked it up. He doesn't watch YouTube tutorials or anything. He doesn't listen to beatbox at all, he's picked it up to a pretty half decent level. And there's some sounds that he can do better than me, which he doesn't try at all.” In addition to doing rather than understanding, beatboxers have also expressed their issues running into a mental block while trying to learn beatbox sounds. ELISII talked about his struggles “pretty much every other sound, sound effects, whistles, and anything vocal, I have a hard time with or at least have a hard time making sound good.” Blah echoed a similar challenge: “all the sounds I spent a lot of time doing, I still can't do.” Their struggles might point to a lack of understanding of the mechanics behind beatboxing sounds. The randomness of understanding combined with the nature of doing rather than understanding has resulted in a unique experience that Blah

discusses: “I was trying to learn inward bass. I didn't know the differences between the different basses, so I learned inward vocal fry by complete accident.” “I had no clue I was wrong. Until I met another beatboxer in person.”

The third theme that emerged from the oral history interviews is that learning beatbox sounds can be made easier when connecting the practice to the theory. To gain deeper insight into the learning process, I interviewed Millersville music education professor Dr. Philip Tacka. Tacka discussed the value of theoretical knowledge in his music career: “I had a lot of mentors in Hungary who were really good, and they not only gave me a greater interest in music theory, but helped me understand music theory in a more holistic way. Because it wasn't separated from performance at all. And it was in fact, theoretical knowledge about music that guided my performances.” Similarly to the music educator, Elisii affirms the idea of connecting theory to practice in his own beatboxing educational practices “I find for the most part, people either learn really well phonetically, so relating sounds to words, or mechanically.” “I haven't had an issue where someone wasn't able to learn a sound, technique, or pattern that way.”

Conclusion

From learning through the experiences of beatboxers and music educators in my Oral History study, I believe that there is a long way to go for beatbox education. The general feeling I got from my interviewees could be described as uncertainty. And while some of them were more confident in their beatboxing capabilities, and teaching skills, it seems that when looking at the wider scope, this feeling wasn't common. Beatboxing, comparatively

to more popular musical instruments, is a young art form, fostered by a mid-sized international online community, and although people have worked really hard in getting the community to where it is today, I believe there's still a lot to do for beatbox to become a well understood artform with ease of access.

References

- A. Blah, personal communication, December 13, 2023
- Blaylock, R., Patil, N., Greer, T., & Narayanan, S. S. (2017). Sounds of the human vocal tract. *Interspeech 2017*.
- Dehais-Underdown, A., Vignes, P., Crevier-Buchman, L., & Demolin, D. (2021, November). In and out: production mechanisms in Human Beatboxing. In *Proceedings of フレイク, & リー*. (2019). 英文音声学による「ボイスパーカッション」. 長崎ウエスレヤン 大学現代社会学部紀要, 17(1), 1-5.
- G. Elisii, personal communication, December 11, 2023
- G. Steenkamp, personal communication, December 10, 2023
- Meetings on Acoustics 181ASA (Vol. 45, No. 1, p. 060005). Acoustical Society of America.
- Paroni, A., Henrich Bernardoni, N., Savariaux, C., Løevenbruck, H., Calabrese, P., Pellegrini, T., Mouysset, S., & Gerber, S. (2021). Vocal drum sounds in human beatboxing: An acoustic and articulatory exploration using electromagnetic articulography. *Journal of the Acoustical Society of America*, 149(1), 191–206.
- Patil, N., Greer, T., Blaylock, R., & Narayanan, S. S. (2017). Comparison of Basic Beatboxing Articulations Between Expert and Novice Artists Using Real-Time Magnetic Resonance Imaging. In *Interspeech* (pp. 2277-2281).
- P. Tacka, personal communication, December 5th, 2023
- Proctor, M., Bresch, E., Byrd, D., Nayak, K., & Narayanan, S. (2013). Paralinguistic mechanisms of production in human “beatboxing”: A real-time Magnetic Resonance Imaging Study. *The Journal of the Acoustical Society of America*, 133(2), 1043–1054.
- Stowell, D., & Plumbley, M. D. (2008). Characteristics of the beatboxing vocal style. Dept. of

Electronic Engineering, Queen Mary, University of London, Technical Report, Centre for
Digital Music C4DMTR-08-01.